



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application: Alan B. Shuey

Serial No.: 10/085,543

Confirmation No.: 9808

Filed: February 28, 2002

Group Art Unit: 3632

Examiner: Korie H. Chan

Supervisory Patent Examiner: Les Braun

Assignee: Ductmate Industries, Inc.

Title of Invention:

**Cable Support Systems**

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**BRIEF ON APPEAL**

**37 CFR 1.192**

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December 16, 2004

1. **REAL PARTY IN INTEREST**

The real party in interest is the Assignee, Ductmate Industries, Inc., a Pennsylvania corporation.

2. **RELATED APPEALS**

There are no related appeals.

3. **STATUS OF CLAIMS**

This application, originally as filed, contained twenty-two (22) claims. A restriction

request was made by the Examiner to restrict the claims. In a telephone interview with Examiner Jinhee Lee on April 30, 2002, Applicant's Counsel, George Raynovich, Jr., made a provisional election without traverse to prosecute claims 1, 3-5, 8-10 and 14-16. This was confirmed in the Examiner's Official Action dated November 21, 2002 and in Applicant's Amendment dated January 29, 2003 and filed January 29, 2003 in response to the November 21, 2002 Office Action. The January 29, 2003 Amendment canceled claim 1 and amended claim 3 to be written in independent format and to include what was previously claimed in claim 1. In an April 7, 2003 Office Action claims 3-5, 8-10 and 14-16 were rejected and the rejection was made final. Claims 3-5, 8-10 and 14-16 were appealed. Prosecution was reopened with a March 11, 2004 Office Action. Claim 3-5 and 8 were amended in the response filed on June 3, 2004. Claims 3-5, 8-10 and 14-16 were finally rejected on September 17, 2004. Claims 1-2, 6-7, 11-13 and 17-22 are canceled. The claims on appeal are 3-5, 8-10 and 14-16. These claims appear in the Appendix attached to this Brief.

#### 4. STATUS OF AMENDMENTS

There has been no Official Amendment filed after the final rejection of the Examiner dated September 17, 2004.

#### 5. SUMMARY OF INVENTION

This invention relates to an apparatus for suspending an object from an overhead structure by means of cables. The structure of the apparatus provided includes a generally "C" shaped clamp body with a threaded fastener threadingly received within one leg of the "C" shaped body

to clamp the “C” shaped body onto an overhead beam. A vertical bore through the clamp body receives a cable to be suspended from the overhead beam. (Page 1, paragraph 0001, lines 1-2; pages 1-2, paragraph 0003, lines 1-3). The vertical bore includes a conical end portion at the lower part of the vertical bore. A wedge retainer is moveable vertically within the bore. Wedges retained by the wedge retainer contact the cable within the bore when the retainer is at the lower part of the bore. A spring urges the wedge retainer downwardly relative to the bore so that when the cable is forced upwardly through the wedges, the cable is restricted from downward movement. (Page 2, paragraph 0004, lines 1-7).

### **Claim 3**

3. A clamp for a cable support system to suspend an object from an overhead beam comprising:

a generally “C” shaped clamp body (14); (Page 4, paragraph 0021, lines 3-4; Figs. 1-3)

a threaded fastener (16) threadingly received within one leg of said “C” shaped body (14) to clamp said “C” shaped body (14) onto said overhead beam (12); (Page 4, paragraph 0021, lines 4-5; Figs. 1-3)

a vertical bore (20) through the vertical portion of the “C” of said clamp body (14) for the purpose of receiving a cable (34) that is suspended from said overhead beam (12); (Page 4 paragraph 0021 lines 6-7; Figs 1-3)

a conical end portion (22) at the lower part of said bore (20); (Page 4, paragraph 0021, lines 6-7; Figs. 1-3)

a wedge retainer (24) vertically movable within said bore (20); (Page 4, paragraph 0021, lines 6-7; Figs. 1-3)

wedges (26) retained by said wedge retainer (24) for the purpose of contacting a cable (34) within said bore (20) and to be forced against said cable (34) by said conical end portion (22) of said bore (20) when said retainer (24) is at the lower part of said bore (20); and (Page 4, paragraph 0021, lines 11-14; Figs. 1-3)

a spring (28) to urge said wedge retainer (24) downwardly relative to said bore (20). (Page 4, paragraph 0021, lines 11-14; Figs. 1-3)

#### **Claim 8**

A cable support system for hanging an object at a desired distance below an overhead

beam comprising:

a cable

a clamp (10) having a generally “C” shaped clamp body (14) with a threaded

fastener (16) threadingly received within one leg of said “C” shaped body (14) to clamp said “C” shaped body (14) onto said overhead beam (12) and a vertical bore (20) through said clamp body (14) to receive the cable (34) to be suspended from said overhead beam (12), said vertical bore (20) having a conical lower end portion (22) with a wedge retainer (24) and wedges (26) vertically movable within said bore (20) whereby said wedges (26) contact said lower conical end portion (22) and said cable (34) to wedge said cable (34) into position within said bore (20), the vertical position of said cable (34) relative to said bore (20) being vertically adjustable by forcing said cable (34) upwardly to release said wedges (26); (Page 4, paragraph 0021, lines 1-14; Figs.1-3, Page 4, paragraph 0022, lines 1-8; Figs. 1-3)

an object (72) to be suspended by said cable (34a) at a predetermined height below said beam; and (Page 7 paragraph 0030 lines 6-8; Fig 9)

means for connecting said cable to said object (72). (Page 7, paragraph 0030, lines 6-8; Fig. 9)

The means plus function structure for claims 8 and 9 can be found on page 7, paragraph 0030, lines 6-8; Fig. 9.

## 6. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 3-5, 8-10 and 14-16 stand rejected under 35 U.S.C. § 103(a) as being obvious over Redman et al. (U.S. Patent No. 4,550,890) in view of Nelson (U.S. Patent No. 3,069,738) or Sword (U.S. Patent No. 4,653,792) in further view of Arakawa (U.S. Patent No. 4,656,698).

## 7. ARGUMENT

The Examiner has rejected claims 3-5, 8-10 and 14-16 under 35 U.S.C. § 103(a) as being unpatentable over Redman et al. (U.S. Patent No. 4,550,890) in view of Nelson (U.S. Patent No. 3,069,738) or Sword (U.S. Patent No. 4,653,792) in further view of Arakawa (U.S. Patent No. 4,656,698).

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP 2143.

The Examiner has failed to show a *prima facie* case of obviousness in this case because she has not shown suggestion or motivation to modify or combine the reference teachings and has not shown that the combined references teach all the claim limitations.

Suggestion or Motivation

“[A]n examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention.” *In re Rouffett*, 149 F.3d 1350, 1357 (Fed Cir. 1998).

The Examiner has failed to show any suggestion or motivation to modify or combine the references to teach the claim limitations. The Examiner is improperly using the Applicant's invention as a blue print for piecing together elements in the prior art.

The Examiner has indicated the following as the basis for her conclusion of obviousness:

“It would have been obvious to one of ordinary skill in the art to modify the strap and strap retention assembly of Redman such that the strap is substituted with a cable for the reason that straps and cable suspension support are well-known mechanical equivalents as demonstrated by Nelson and Sword, and consequently substituting the strap retention wedge system of Redman for a cable retention wedge system as taught by Arakawa.” Page 3 of September 17, 2004 Office Action.

Applicant has stated previously in the record and will again state that Nelson and Sword do not demonstrate that straps and cable suspension supports are well-known mechanical

equivalents. Nelson does not mention straps. Sword does not mention straps. It does not appear that the strap in Redman could hold the objects in Nelson or Sword and therefore the strap in Redman is not equivalent to the cables in Nelson and Sword. The weight of the objects (a log for the logging process) suspended in Sword and Nelson is much greater than the weight of the pipe supported in Redman.

Assuming arguendo, that the straps in Redman and the cables in Nelson or Sword were equivalent, it does not mean that Applicant's claims are obvious. The mere existence of functional and mechanical equivalence does not establish obviousness. *In Re Scott*, 323 F.2d 1016, 1019; 139 U.S.P.Q. (BNA) 297, \_\_\_\_ (C.C.P.A. 1963).

The Examiner must show that there is motivation to replace the strap in Redman with the cable in Sword or Nelson. The Examiner has not provided any motivation to do this. While the use of cable for suspending objects is old, there has been no shown motivation to use the cable in Nelson or Sword in combination with a generally "C" shaped clamp in Redman. A new combination of old subject matter is patentable. *Rosemount, Inc. v. Beckman Instruments, Inc.* 727 F.2d 1540 (Fed. Cir. 1984). "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992); 1992 U.S. App. Lexis 18470; 23 U.S.P.Q. 2D (BNA) 1780 (emphasis added). "A statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the



references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references". MPEP § 2143 (citing *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)).

The Examiner has not shown the desirability of replacing the straps that are used in connection with the C-clamp in Redman with the cables shown in Nelson or Sword. It is not just a matter of replacing straps with cables. If one wanted to replace Redman's straps with Nelson's or Sword's cables, Redman's structure would not work to hold cables. Redman's straps also use a different object holding means than the object holding means taught by Nelson or Sword. The object holding means are not compatible and are not equivalent with each other. The Examiner has failed to show how it would be desirable or the motivation or suggestion to replace the object holding means in Redman with that of Nelson or Sword which is necessary to reject claims 8-10 and 14-16 (which claim object holding means). The fact that cables and straps are old and well known has nothing to do with the motivation to use the cables in Nelson or Sword with Redman. The Examiner has not shown that it is desirable to replace the straps in Redman with the cables in Nelson or Sword with the object holding means in Nelson or Sword.

The Examiner also states it would be obvious to replace the Redman's retention structure with the retention structure in Arakawa. However, there is no motivation in Redman or Arakawa to suggest the desirability of such replacement. Arakawa is used for a totally different purpose. Arakawa teaches an apparatus for holding one end of a wire to a first support structure and the

other end of the wire to a second support structure. Figures 5-8 show a wire supported in two separate locations and Column 4, lines 39-68 discuss how to use the apparatus to secure the wire (w) to two support locations.

There is no suggestion or motivation to take a device that holds one end of a wire and is to be used on two support structures (Arakawa '698) and incorporate it into a device that uses both ends of a strap from one support structure. The only motivation to make this combination is Applicant's claim.

The Declaration of James R. Moon, an expert in the field, was submitted with Applicant's June 3, 2004 Amendment. Mr. Moon's declaration indicates that the claimed invention is not obvious because there is no motivation to combine the art. The Examiner did not mention the Declaration in the September 17, 2004 Office Action, however, Applicant's counsel confirmed that it was considered in a telephone conversation with the Examiner on November 15, 2004.

The Examiner has failed, in all of the Office Actions, to show motivation and has changed the reasoning behind the obviousness rejection. The original reasoning was that it was well within the ordinary skill of the art to combine the prior art. Because the Examiner failed to provide the necessary suggestion or motivation, an inference can be drawn that the Examiner used hindsight. *Interactive Techs., Inc. v. Pittway Corp.*, Civ. App. No. 98-1464, slip op. at 13 (Fed. Cir. June 1, 1999)(unpublished), *cert. denied*, 528 U.S. 1046 (1999). The Examiner has

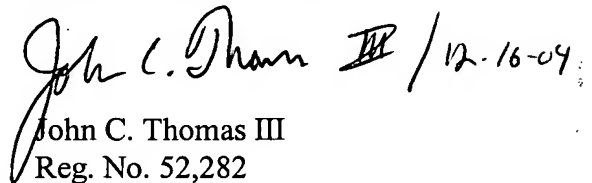
used the Applicant's claimed invention as a blueprint and has combined references without any teaching or motivation to do so. It is well established law that it is improper to use Applicant's claims as a blueprint and to reconstruct the invention from the prior art using the claim as a blueprint. *Grain Processing Corp. v. American Maize Products Corp.* 840 F.2d 902 (Fed.Cir.1988); *Smith Kline Diagnostics Inc. v. Helena Laboratories Corp.* 859 F.2d. 878 (Fed. Cir. 1988); *In re Stencel*, 828 F.2d. 751 (Fed. Cir. 1987); *In re Dow Chemical*, 837 F.2d. 469 (Fed. Cir. 1988); *Northern Telecom, Inc. v. Datapointe Corp.* 908 F.2d. 931; (Fed. Cir. 1990 ), *cert. denied*, 11 S.Ct.296 (1990); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132 (Fed. Cir. 1985).

The Examiner has failed to provide a *prima facie* case of obviousness.

## 8. CONCLUSION

It is respectfully submitted that the Applicant's claims 3-5, 8-10 and 14-16 are not obvious in view of the art and are patentable and the Examiner's rejection of the claims is erroneous as a matter of law and should be reversed and the application allowed.

Respectfully submitted,

 / 12-16-09

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